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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,722	06/25/2003	Dai Sung Moon	P68940US0	4756

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EXAMINER

PHILOGENE, HAISSA

ART UNIT PAPER NUMBER

2821

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/602,722

Applicant(s)

MOON, DAI SUNG

Examiner

Haissa Philogene

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 2,3 and 6 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION*****Drawings***

Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

Claim 5 is objected to because of the following informalities: in line 2, change "DC power the booster 800" to --lamp driving unit (900)--. Appropriate correction is required. Claims 1-6 are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

***Claim Rejections - 35 USC § 112***

Claims 2 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited limitation "a lighting fixture can be easily coupled at the center of the case" is not definite since it has been held that the recitation that an element "can be" or "capable of" performing a function is not a positive limitation but only requires the ability to so perform.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art, Fig.2, in view of Cho et al., Patent No. 6,316,883.

Applicant's admitted prior art discloses an electronic ballast for a fluorescent lamp having a power supply (601), a power supply unit (610) and a DC transformation unit (half-bridge rectifier D12 and D13), comprising a DC power boosting unit (C13, C14) for boosting a power supplied from the DC transformation unit, and a lamp driving unit (300) for selectively turning on the lamp (BULB) via switching elements Q1, Q2 using the voltage outputted from the DC power boosting unit. Applicant's admitted prior art does not disclose the lamp driving unit for selectively turning on a plurality of lamps.

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Cho disclose in Fig.4 an electronic ballast having a lamp driving unit (2) for selectively turning on a plurality of lamps (as shown) (see also Col.4, lines 36-45). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ the lamp driving unit as taught by Cho into the Applicant's admitted prior art type electronic ballast, because it would allow a simple circuit construction and ensure a stable operation of the electronic ballast, thereby improving the efficacy of the ballast.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Cho as applied to claim 3 above, and further in view of Yan, Patent No. 6,531,824.

Applicant's admitted prior art in view of Cho discloses the claimed invention substantially as explained above except for the electronic ballast being surrounded and protected by a case having a hole through which a lighting fixture can be easily coupled at the center of the case. Yan discloses an electronic ballast 10 being surrounded and protected by a case 35 having a hole (as shown) through which a lighting fixture (see abstract, lines 1-3) is readable as capable of easily coupling at the center of the case. Therefore. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ the ballast case as taught by Yan into the Applicant's admitted prior art in view of Cho type ballast system, because it would allow a ballast that can be used with a low profile lighting fixture, thereby improving the ballast system.

***Allowable Subject Matter***

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Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 1 is allowed.

Claim 2 would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hammer et al., Patent No. 5,506,474 ; Belle et al., Patent No. 5,691,598.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (571) 272-1827. The examiner can normally be reached on 6:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571)272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Haissa Philogene  
Primary Examiner  
A.U. 2821  
*Haissa Philogene*